

REMARKS

Claims 1-15 are currently pending in the application with Claims 1-9 and 12-14 being amended with this response. The Specification is objected to in the action dated January 30, 2008. In the action, Claims 1-13 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 7,221,764 to Cohen et al. (“Cohen”) in view of U.S. Patent No. 7,072,657 to Watanabe et al. (“Watanabe”), and Claims 14 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,289,102 to Ueda et al. (“Ueda”) in view of Watanabe. The action states that the arguments presented in the last reply were not persuasive.

Advisory Action was issued on May 21, 2008. A request for continued examination, RCE is filed herewith.

It is respectfully submitted that claims 1-15 are in condition for allowance and early notice of the same is solicited. Reconsideration of the present application is respectfully requested, and should questions still remain, Applicants further request an initiation for Interview by the examiner at his/her convenient time and date so as to advance prosecution of the application.

Regarding the objection to the Specification, the Applicants had previously removed the subject matter “carrier waves” with the aim to make the claims coincide with the Specification in response to the 101 rejection. While the Applicants disagree with the nature of the objection, to expedite the allowance of the application, the cancelled language is re-added as suggested by the Examiner, thereby rendering the objection moot.

Regarding the rejection of independent Claims 1, 8, 11, and 12, the action dated January 30, 2008 alleges that Cohen combined by Watanabe teaches every element of the claims. The pending claims are amended herein for added clarity, and Applicants respectfully submit that the references cited fail to disclose or suggest the recited claims, now or then, as the teachings disclosed in the references appear quite unrelated to the instant application.

Applicants have provided below apparent applicable summary of Cohen and Watanabe so that the Office may verify for itself the same after a further review of Cohen and Watanabe.

Cohen appears to disclose a key rollover strategy for wireless network security where an access point generates security keys and a wireless station automatically receives the security keys from the access point during authentication, and the keys are changed or updated on a rolling basis during subsequent re-authentication to the access point. Moreover, it appears the generated keys are for communicating with the same access point with, for example, a transmit key used when the wireless station transmits to the access point and a different transmit key used when the access point transmits to the wireless station. It further appears that the keys are also changed or updated when the wireless station roams to a different access point by receiving keys from the new access point during authentication or re-authentication with the new access point.

Cohen further appears to disclose that a WLAN may be a mixed system with a wireless station that complies with the IEEE 802.1x standard and a wireless station that does not comply with the IEEE 802.1x standard. Cohen appears to disclose that keys may be automatically updated, as described above, where the wireless station complies with the IEEE 802.1x standard. Where the wireless station does not support the IEEE 802.1x standard, Cohen appears to disclose that a fixed key may be used which is manually set by an administrator. Where an access point is manually set with a fixed key, Cohen appears to disclose that the access point can communicate the fixed key to the wireless station that supports the IEEE 802.1x standard.

Whether a wireless station has rollover keys and/or a fixed key, it appears that they are used by the wireless station to communicate with the same access point from which the keys are received during authentication (or subsequent re-authentication to change or update the rollover keys).

(See Cohen, for example, collectively: col. 3, lines 29-54; col. 5, lines 5-30 and lines 38-56; col. 7, lines 22-40 and lines 48-67; col. 8, lines 28-33 and col. 8, line 48 to col. 9, line 11; col. 9, lines 31-51 and col. 9, line 65 to col. 10, line 23; col. 10, lines 43-53; and col. 11, lines 38-50.)

However, Applicants submit that, among other teachings, Cohen fails to disclose or suggest, for example, the teaching of “obtaining by a wireless station in advance an encryption key set including the differentiated encryption keys for the corresponding access points when initial authentication of the wireless station is performed” and/or “differentiated encryption keys provided to communicate data with corresponding access points,” as recited in independent Claims 8 and 11, and similarly recited in independent Claims 1 and 12. In the action dated January 30, 2008, in

particular, at page 3, it appears that figures 2C and 3 and col. 5, lines 5-25 of Cohen are asserted as disclosing one or more of the above. Applicants respectfully submit that it does not, and invite the Office to verify for itself the same after a careful review of Cohen. Accordingly, it is submitted that a prima facie case of unpatentability is not established.

Regarding claim 1, Applicants further note that page 2 of the Advisory Action dated May 21, 2008 asserts that:

Continuation of 11. does NOT place the application in condition for allowance because: The newly amended language of claim 1 requires a wireless station to request an access point to perform initial authentication and the wireless station obtaining differentiated encryption keys in advance when the initial authentication of the wireless station is performed. To summarize, when the wireless station is initially authenticated by the access point, the wireless station obtains differentiated keys in advance. Cohen teaches this by delivering a plurality of keys to a wireless station in a first time period T0-T1. These keys are used for authentication and are differentiated in that they use indexes for rolling keys so one key can be updated to make the next key the transmit key. The language of claim 2 distinguishes how the plurality of keys are differentiated into separate classes.

However, as respectfully noted above, Cohen fails to disclose or suggest, for example, that “the differentiated encryption keys [are] provided to communicate data with corresponding access points” (emphasis and connector added), as recited in claim 1. As further noted above, in Cohen, it appears the generated keys are for communicating with the same access point with, for example, a transmit key used when the wireless station transmits to the access point and a different transmit key used when the access point transmits to the wireless station. It further appears that the keys are also changed or updated when the wireless station roams to a different access point by receiving keys from the new access point during authentication or re-authentication with the new access point. Accordingly, Applicants respectfully submit that at least the above illustrates that a prima facie case of unpatentability is not established.

Applicants further submit that Watanabe does not cure the deficiencies of Cohen. Watanabe appears to disclose a method of coordinating the handoff of a mobile carrier between a first access network and a second access network. The method includes attempting a hand-off from a first access network that the mobile carrier is currently operating within to a second access network, wherein the attempting includes authenticating at the hyper operator only that the user may have access to the second access network via a contract earlier established.

(See Watanabe, for example: abstract; col. 5, lines 8-55; and col. 6, lines 60-65.)

Since Watanabe fails to cure the deficiencies of Cohen, Applicants respectfully submit that a prima facie case of obviousness is not established as required by 35 U.S.C. §103(a). Therefore, withdrawal of the rejection is respectfully requested.

Regarding the rejection of independent Claim 14, among other teachings, Ueda and Watanabe, individually or combined, fail to disclose or suggest, for example, the teaching of “access authorization information being used for allocating encryption keys differentiated according to access authorization classes, and the differentiated encryption keys are provided to communicate data with corresponding access points,” as recited in Claim 14. In the action dated January 30, 2008, in particular, at page 9, it appears that figure 4, ref. num 408A-D, 410A-B, and 412A-F and col. 5, lines 8-49 of Watanabe are asserted as disclosing one or more of the above. Applicants respectfully submit that it does not when placed in context with the rest of the disclosure, and invite the Office to verify for itself the same after a careful review of Watanabe. Accordingly, it is respectfully submitted that a prima facie case of obviousness is not established as to Claim 14. Therefore, withdrawal of the rejection is respectfully requested.

Again, pending claims are amended herein for added clarity, and Applicants respectfully submit that the references cited fail to disclose or suggest the recited claims, now or then, as the teachings disclosed in the references appear quite unrelated to the instant application. Finally, as apparent in view of at least the above, a rolling key and a fixed key noted in the action dated January 30, 2008, at pages 10-11, do not cure the deficiencies presented above for the claims at issue.

Because the above arguments put independent Claims 1, 8, 11, 12 and 14 in condition for allowance, then, at least because of their dependence on these claims respectively, dependent Claims 2-7, 9-10, 13 and 15 are also in condition for allowance.

The application as now presented, containing Claims 1-15 are believed to be in condition for allowance. Early allowance of the same is respectfully solicited. Should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters or place any issue in better condition for Appeal, the Examiner may contact Applicants’ representative at the number given below.

Respectfully submitted,

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